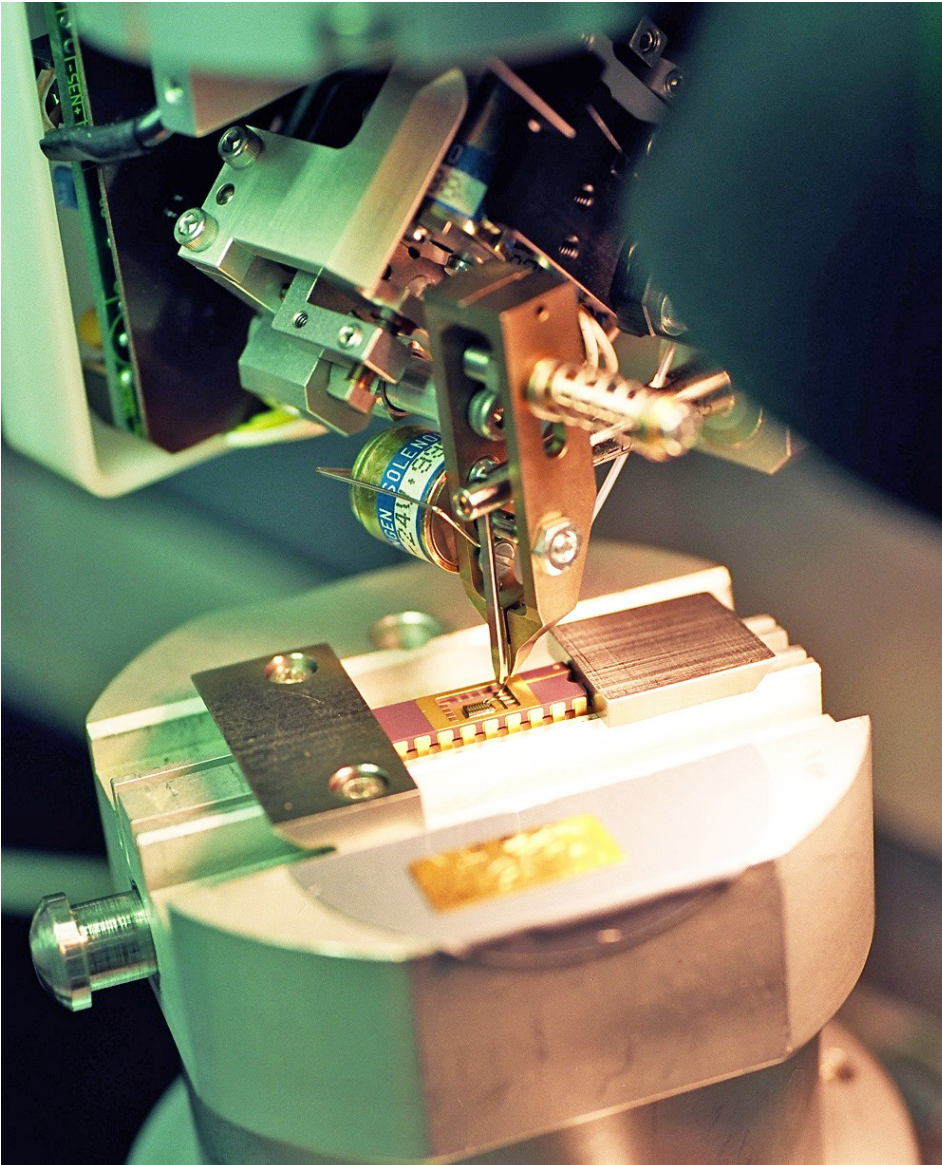
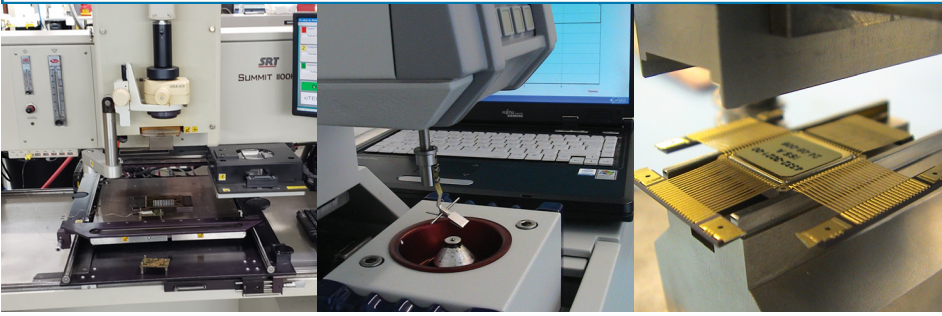




# microcross

one source. one solution.™

## Robotic Hot Solder Dip



*Corfin is the industry-recognized leader in innovative component modification technologies and is now integrated with Microcross to provide a one source solution.*

PB & PB-FREE FINISH

CONFORMANCE WITH  
GEIA-STD-0006

AUTOMATED DIPPING

SOLDER LEVEL SENSING

TIN & OTHER PLATING REMOVAL

TRIM AND FORM

FULLY CUSTOMIZABLE  
LEAD FORMING

PTH TO SMT

FLAT PACK CONVERSION

*One Source Solution for Component Modification Services*

## Robotic Hot Solder Dip

- **Tin Whisker Elimination** – per automated process removes 100% of the pure tin and replaces it with SnPb (tin-lead).
- **Gold Embrittlement Elimination** – Removes gold and replaces it with SnPb. Typically required to replace the gold beyond the effective seating plane.
- **RoHS Compliance** – Removes the SnPb and replaces it with SAC305 (tin silver copper) or any other specified alloy.

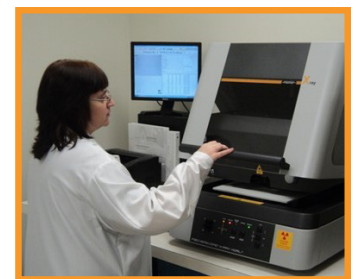
## Lead Preparation

- **Trim and Form** – Forms and trims straight leads for surface mount placement per the customer's drawing or a drawing proposed by Micross. An RHSD Process typically follows this process to coat leads and prevent oxidization.
- **Reconditioning of Bent Leads** – Robotic process realigns leads that are bent and scans to verify results.
- **Lead-Attach to Leadless Chip Carriers** – Reduce solder joint stress through attachment of J-shape and L-shape leads to LCC's using thermocompression bonding.



## Test

- **X-Ray Fluorescence Analysis (XRF)** – Used to determine lead (Pb) content of termination finishes and plating thickness. XRF Testing of solder composition and thickness per MIL-PRF-38535.
- **Fine and Gross Leak Testing** – Also referred to as Seal Test, these tests verify that the hermetic seal of a component is intact and typically follows Trim and Form and/or RHSD of a glass-sealed device.
- **X-Ray Inspection** – 2D X-Ray Analysis System to see what traditional microscopy cannot, including obscured joints beneath BGAs, QFNs and other components.
- **Cleanliness Testing** – Determines ionic contamination on the part that can cause current leakage between leads.
- **Solderability Testing** – Verify that termination finishes will readily accept solder during assembly using J-STD-002 test or other military specification.



## Quality

- Quality System is AS9100 / ISO9001
- ITAR-Registered
- Full ESD environment (JESD625 compliant)
- Certified for Class 0 ESD processing to ANSI/ESD S20.20
- NADCAP AC7120 Certified (Manchester facility)
- Fully compliant to GEIA-STD-0006 and IEC TS62647-4
- Temperature and humidity controls
- Fully traceable documentation
- Integrated production control system

### ABOUT MICROSS

Micross is the global one-source provider of Bare Die & Wafers, Advanced Interconnect Technology, Custom Packaging & Assembly, Component Modification Services, Electrical & Environmental Testing and Hi-Rel Products to manufacturers and users of semiconductor devices. In business for more than 40 years, our extensive hi-reliability capabilities serve the Aerospace & Defense, Space, Medical and Industrial markets. Micross possesses the sourcing, packaging, assembly, engineering, test and logistics expertise needed to support an application throughout its entire program cycle.